

CLAIMS:

1. A device, comprising:
a two-way radio comprising a transmitter system and a receiver system, wherein the transmitter system is adapted to transmit a first digitized video signal, wherein the transmitter system is adapted to transmit a first digitized audio signal, wherein the receiver system is adapted to receive a second digitized video signal, and wherein the receiver system is adapted to receive a second digitized audio signal.
2. The device of claim 1, wherein the transmitter system comprises an encoder block adapted to compress the first digitized video signal, the first digitized audio signal, or both the first digitized video signal and the first digitized audio signal, wherein the receiver system comprises a decoder block adapted to decompress the second digitized video signal, the second digitized audio signal, or both the second digitized video signal and the second digitized audio signal, wherein the encoder block comprises a video encoder for compressing the digitized video signal, an audio encoder for compressing the digitized audio signal, and a multiplexer coupled to the video encoder and the audio encoder, and wherein the decoder block comprises video decoder for decompressing the second digitized video signal, an audio decoder for decompressing the second digitized audio signal, and a demultiplexer coupled to the video decoder and the audio decoder.
3. The device of claim 2, wherein the encoder block further comprises a first switching means adapted to switch the digitized audio signal to the audio encoder, the digitized video signal to the video encoder, or both the digitized audio signal to the audio encoder and the digitized video signal to the video encoder.
4. The device of claim 2, wherein the decoder block further comprises a second switching means is adapted to switch output signals from the demultiplexer to the video decoder, the audio decoder, or both the video decoder and the audio decoder, and wherein the output signals from the demultiplexer are selected from the group consisting of the

second video signal, the second audio signal, and both the second video signal and the second audio signal.

5. The device of claim 2, wherein the encoder block comprises a hardware encoder block, and wherein the decoder block comprises a hardware decoder block.
6. The device of claim 2, wherein the encoder block comprises a software encoder block, and wherein the decoder block comprises a software decoder block.
7. The device of claim 2, wherein the transmitter system further comprises a video input device for accepting a video signal, an audio input device for accepting an audio signal, an analog to digital (A/D) convertor block for digitizing the video signal and the audio signal, a modulator for modulating at least one of the digitized video and audio signal so as to generate at least one modulated signal, a transmitter for transmitting the at least one modulated signal, and an antenna coupled to the transmitter, and wherein the receiver system further comprises a receiver coupled to the antenna for receiving a second modulated signal, a demodulator for demodulating the second modulated signal, a digital to analog (D/A) convertor block for converting the second digitized video signal into an analog video signal and the second digitized audio signal into an analog audio signal, a video output device for displaying the analog video signal, and an audio output device for outputting the analog audio signal.
8. The device of claim 7, wherein the video input device comprises a video camera, and wherein the video output device comprises a monitor.
9. The device of claim 8, wherein the monitor is selected from the group consisting of a liquid crystal display (LCD) monitor and a cathode-ray tube (CRT) monitor.
10. The device of claim 8, wherein the monitor is selected from the group consisting a color monitor and a monochrome monitor.

11. The device of claim 1, wherein the two-way radio is adapted to transmit and receive audio and video signals over a service selected from the group consisting of Family Radio Service (FRS) and General Mobile Radio Service (GMRS).
12. The device of claim 1, wherein the video signal and the audio signal are both digitally compressed using a digital compression standard selected from the group consisting of Moving Pictures Experts Group- 4 (MPEG- 4) and H.263, and wherein the second video signal and second audio signal are both digitally decompressed using a digital decompression standard selected from the group consisting of MPEG- 4 and H.263.
13. The device of claim 12, wherein the digitally compressed video signal and the digitally compressed audio signal are both transmitted in a bandwidth that is in a range of about 10 Kilobits per second (Kbps) to about 20 Kbps.
14. A method, comprising:
providing a two-way radio comprising a transmitter system, wherein the transmitter system comprises a video input device, an audio input device, an analog to digital A/D converter block, an encoder block, a modulator, and a transmitter;
receiving and digitizing, by the A/D converter block, a video signal from the video input device and an audio signal from the audio input device;
digitally compressing, by the encoder block, the digitized audio signal, the digitized video signal, or both the digitized audio signal and the digitized video signal;
modulating, by the modulator, the digitally compressed audio signal, the digitally compressed video signal, or both the digitally compressed audio signal and the digitally compressed video signal so as to generate a digitally compressed modulated signal; and
transmitting, by the transmitter, the digitally compressed modulated signal.
15. The method of claim 14 , wherein the encoder block comprises a video encoder, an audio encoder, and a multiplexer coupled to the video encoder and the audio encoder, wherein the video encoder digitally compresses the video signal, and wherein the audio encoder digitally compresses the audio signal.

16. The method of claim 15, further comprising switching by a switching means for switching the digitized audio signal to the audio encoder, the digitized video signal to the video encoder, or both the digitized audio signal to the audio encoder and the digitized video signal to the video encoder.
17. The method of claim 14, wherein the encoder block comprises a hardware encoder block,
18. The method of claim 14, wherein the encoder block comprises a software encoder block.
19. The method of claim 14, wherein the video input device comprises a video camera.
20. The method of claim 14, further comprising transmitting the digitally compressed modulated signal over a service selected from the group consisting of Family Radio Service (FRS) and General Mobile Radio Service (GMRS).
21. The method of claim 14, wherein digitally compressing the digitized audio signal and the digitized video signal uses a digital compression standard selected from the group consisting of Moving Pictures Experts Group- 4 (MPEG- 4).
22. The method of claim 14, further comprising transmitting the digitally compressed modulated signal in a bandwidth that is in a range of about 10 Kilobits per second (K/bs) to about 20 K/bs.
23. The method of claim 14, further comprising;
wherein the two way radio further comprises a receiver system, wherein the receiver system comprises, a receiver, a demodulator, a decoder block, a digital to analog D/A converter block, a video output device and an audio output device;
receiving, by the receiver, a second digitally compressed modulated signal from a second two-way radio;

demodulating, by the demodulator, the second digitally compressed modulated signal;

decompressing, by the decoder block, the second digitally compressed signal comprising a second digitally compressed audio signal, a second digitally compressed video signal, or both the second digitally compressed audio signal and the second digitally compressed video signal;

converting, by the D/A converter block, any of said decompressed digitized signals into analog signals; and

outputting the analog signals to the audio output device, the video output device, or both the audio output device and the video output device.

24. The method of claim 23, wherein the decoder block comprises a video decoder, an audio decoder, and a demultiplexer coupled to the video decoder and the audio decoder, wherein the video decoder decompresses the second digitally compressed video signal, and wherein the audio decoder decompresses the second digitally compressed audio signal.

25. The method of claim 24, further comprising switching by a second switching means for decompressing output signals from the demultiplexer, wherein the output signals are selected from the group consisting of the second digitally compressed video signal, the second digitally compressed audio signal, and both the second digitally compressed video signal and the second digitally compressed audio signal.

26. The method of claim 23, the decoder block comprises a hardware decoder block

27. The method of claim 23, the decoder block comprises a software decoder block

28. The method of claim 23, wherein the video output device comprises a monitor, and wherein audio output device comprises an amplifier and a speaker.

29. The method of claim 23, further comprising receiving the second digitally compressed modulated signal over a service selected from the group consisting of Family Radio Service (FRS) and General Mobile Radio Service (GMRS).

30. The method of claim 23, wherein the second digitally compressed signal is compressed using a digital compression standard selected from the group consisting of Moving Pictures Experts Group- 4 (MPEG- 4).
31. The method of claim 23, further comprising receiving the second digitally compressed signal in a bandwidth that is in a range of about 10 Kilobits per second (K/bs) to about 20 K/bs.